

## Water Management in Mexico City and Its Metropolitan Area

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**Abstract :** As urban areas expand, strategic and protected water reserves become more critical. In this study we investigate the water problems in Mexico City and its Metropolitan area. This region faces a complex water problem that concerns not only Mexican boundaries but also international level because is one of the biggest human concentrations in the World. The current water shortage situation raises the necessity of importing surface and groundwater from the Cutzamala River and from the Alto Rio Lerma System respectively. Water management is the real issue in this region, because waste water generation is more than aquifer overexploitation, and surface water loss in the rainfall period is greater than water imported from other regions. However, the possible solutions of the water supply schemes are complicated, there is a need to look for alternatives socially acceptable and environmentally desirable, considering first the possible solutions on the demand side. Also, it is necessary more investment in water treatment plants and hydraulic infrastructure to ensure water supply and decrease the environmental problems in the area. More studies need to be done related to water efficiency in the three sectors.

**Keywords :** megacities, aquifer overexploitation, environmental problems, vulnerability

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